

REMARKS

Claims 1-23 are pending in the present application. Claims 1, 2, 9, 10-13, 19 and 20 were rejected under 35 U.S.C. §102(b) as being anticipated by Westphal, U.S. Patent No. 4, 576,450. Claims 1,-3, 9, 10, 12-15, 19 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawasaki, U.S. Patent Application Publication No. 2001/0030801, in view of Westphal. Claims 4-8, 11, and 21-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawasaki in view of Westphal and in further view of Tandler et al., U.S. Patent No. 6,088,155. Claims 16-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawasaki in view of Westphal and in further view of Sato, U.S. Patent No. 5,519,531.

The claims have been amended. Claim 4 has now been cancelled. Reconsideration of the application is respectfully requested.

Rejections under 35 U.S.C. §102(b), 103(a)

Claims 1, 2, 9, 10-13, 19 and 20 were rejected under 35 U.S.C. §102(b) as being anticipated by Westphal, U.S. Patent No. 4, 576,450. Claims 1,-3, 9, 10, 12-15, 19 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawasaki, U.S. Patent Application Publication No. 2001/0030801, in view of Westphal. Claims 4-8, 11, and 21-23 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawasaki in view of Westphal and in further view of Tandler et al., U.S. Patent No. 6,088,155. Claims 16-18 were rejected under 35 U.S.C. §103(a) as being unpatentable over Kawasaki in view of Westphal and in further view of Sato, U.S. Patent No. 5,519,531.

Westphal describes a microscope tube having a trapezoidal prism 7 that reflects light, via a beam-splitting cube 8, to a hinged mirror 16. The beam-splitting cube reflects part of the light to bayonet mount openings 6. See column 3, line 67, to column 4, line 8, and Fig. 2.

Kawasaki describes a lens barrel having a first optical system G1 having a prism P1 that

directs light to a second optical system G2 having deflecting mirrors M1, M2, which in turn deflect the light to turnable deflecting mirror M3. See Abstract and Fig. 1. Deflecting mirror M1 may be constructed as a half mirror. See paragraph 0085.

Tandler describes a Bauernfeind prism 4 with a partially transparent surface F for dividing a beam S coming from an objective 1 into a visual part Sv and a portion Sf in the direction of photographic or video equipment. See column 2, lines 28-34, and Fig. 1a.

Independent claim 1 of the present application has now been amended so as to "wherein the beam-splitting device includes a Bauernfeind prism configured to reflect therein twice the at least a portion of the light beam." Support for the amendment to claim 1 may be found, for example, at dependent claim 4, which has now been cancelled. As noted by the Examiner, neither Westphal nor Kawasaki expressly disclose the beam-splitting device includes a Bauernfeind prism configured to reflect therein twice the at least a portion of the light beam, as now recited in amended claim 1. See Detailed Action at page 7, fourth paragraph. Because Westphal is missing at least the above-recited feature of claim 1, it cannot anticipate claim 1 or any of its dependent claims.

Nor would it have been obvious to provide the lens barrel of Kawasaki with the beam-dividing Bauernfeind prism 4 of Tandler. First, Kawasaki specifically describes providing a photographic path by either including a prism in addition to the mirrors M1 and M2, or by providing mirror M1 as a half mirror. Thus, there would have been no reason for a person of ordinary skill in the art to attempt to provide a photographic path in Kawasaki by instead providing a more complex device in the form of a Bauernfeind prism. Moreover, Kawasaki specifically requires the formation of an intermediate image IO between deflecting mirrors M1 and M2 to achieve the downstream parallel rays. See Kawasaki, paragraph 0072. If mirror M1 were somehow replaced by the Bauernfeind prism of Tandler, the intermediate image would apparently lie within the Bauernfeind prism and thereby disturb the downstream parallel ray formation. Replacing the mirror M1 by the Bauernfeind prism of Tandler would thus adversely affect the functioning of the Kawasaki lens barrel. For these reasons, it is respectfully submitted that a person of skill in the art would therefore

not have attempted such a substitution.

Independent claim 1 of the present application also recites "the beam splitting device being disposed at a first distance perpendicular from an extension of the optical axis" and "an axis of rotation of the beam deflecting unit is disposed at a second distance perpendicular from the extension of the optical axis, the second distance being greater than the first distance." It is respectfully submitted that there would have been no reason to move the mirror M1 of Kawasaki to a location closer to an extension of the light path extending from objective OB to prism P1 than the location of the turning axis P of turnable deflecting mirror M3 from the extension of the light path extending from objective OB to prism P1, as suggested by the Examiner. See Detailed Action at page 5. It is not clear that such a configuration could even work with the component arrangement of Kawasaki. At a minimum, it appears that a substantial redesign of the system would be necessary. Moreover, it appears that, rather than redesigning the system, the combination of mirrors M1, M2 and M3 of Kawasaki could merely be more easily moved together as a group to the left, closer to the extension of the light path extending from objective OB to prism P1, if the desire were to provide a more compact microscope in Kawasaki. For these reasons, it is respectfully submitted that a person of skill in the art would therefore not have attempted the modification of moving mirror M1 relative to turnable deflecting mirror M3, as suggested by the Examiner.

For all of the above reasons, it is respectfully submitted that a combination of Kawasaki, Westphal and Tandler could not have rendered independent claim 1 or any of its dependent claims obvious.

Withdrawal of the rejection of claims 1, 2, 10-13, 19 and 20 under 35 U.S.C. §102(b) based on Westphal, of claims 1-3, 9, 10, 12-15, 19 and 20 under 35 U.S.C. §103(a) based on Kawasaki in view of Westphal, of claims 4-8, 11 and 21-23 under 35 U.S.C. §103(a) based on Kawasaki in view of Westphal and further in view of Tandler, and of claims 16-18 under 35 U.S.C. §103(a) based on Kawasaki in view of Westphal and further in view of Sato, is respectfully requested.

CONCLUSION

In view of the above amendment, applicants believe the pending application is in condition for allowance.

The Commissioner is hereby authorized to charge any unpaid fees deemed required in connection with this submission, including any additional filing or application processing fees required under 37 C.F.R. §1.16 or 1.17, or to credit any overpayment, to Deposit Account No. 04-0100.

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Respectfully submitted,

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